

MARINE DOCK

USER Manual

Dock Station For Marine ISD-190



BETTER PRODUCT FOR A BETTER FUTURE

Foreword

The Marine Dock ISD-190 enables your handset satellite phone device to be always on and ready to call out or receive the incoming calls. The ISD-190 marine dock features include phone charging management, USB data port, inbuilt ringer and allows antenna and power to be permanently connected to the dock ready for use.

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1. ISD-190 marine dock Design Features

Key Features:

- Quickly searching satellite and GPS position
- Built-in MCU to detect battery status, stop charging when power full
- Hand-free function
- USB Data access
- All in one design and Slim line design
- High quality ABS plastic and Wall or desk mounting
- Integrated active Antenna design

2. Specification

Product Electrical Characteristics:

Supply methods	DC12V~DC30V (Optional : AC 100V~240V / DC 12V Adaptor)
Working voltage range	12V—30V, withstand voltage100V; The voltage polarity protection and surge protection
Working current range	0.025A—0.400A (12V)
Charging power consumption	Current300mA, power3.6W
Charge and communication state power consumption	current 400mA,power 4.8W
Sleep state power consumption	current 25mA,power 0.3W
Peak current	current 2A,power 24W

Physical Characteristics:

Packing dimension	26x25.5x26 cm
Gross Weight	2.95 Kg
Working temperature range	-30℃ to 80℃
Storage temperature range	-35℃ to 85℃
Battery temperature range	0℃ to 45℃

Working humidity range	95% at 40℃
Storage humidity range	95% at 40℃

Power Management Function:

Function	Functional description
Energy saving mode	Automatic detection to complete the battery charge, Switch to sleep state.
Over-voltage protection	When the power supply voltage is too high , automatically cut off power supply, to prevent be burnt out, The highest voltage 100 V.
Short circuit protection	With a power supply short circuit protection function, In order to ensure that the mistake caused power supply short circuit, Product not be burnt out .
Polarity protection	When the power supply polarity reversed connection, product won't boot work , In order to ensure products will not be burnt out.

Battery Charge Function:

Function	Functional description
Charge for internal main power	Battery Power changed to be mainly power source to support Satellite phone and real-time detection charging status, Control charge open and shut off, Protect battery and extend battery life.
Charge for external USB power	Automatic testing an external USB power supply, Switching charge mode and send data via the USB.

3. Installation Instructions

This guide outlines the process for installing the marine dock in the conjunction with an Satellite phone handset.

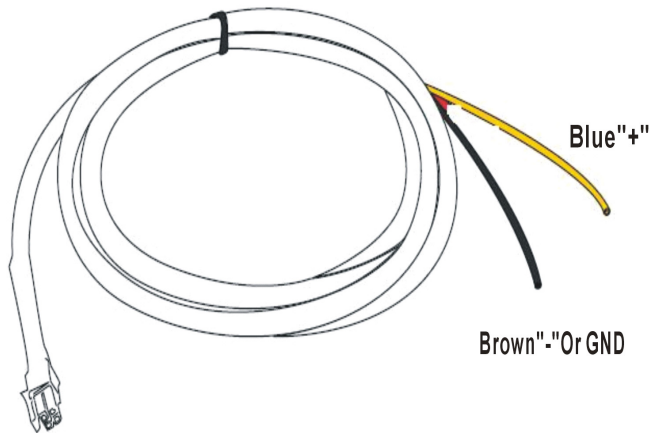
3.1 Installation Guidelines

①.This kit must not be used with any other device other than the international marine satellite phone handset.

- ②.Only qualified personal should install communication equipment. Otherwise, if install mistake, maybe the product can't work properly.
- ③.Ensure that the units are protected from dirty and moisture.
- ④.Leave space around the units to allow cooling and ensure there are enough space for cables.
- ⑤.Ensure that mounting surface is strong enough to support the dock station.
- ⑥.Allow enough room so that you can easily insert the satellite phone handset and out from the station.
- ⑦.Ensure sufficient room is allowed for the antenna and interface cables to be routed from the rear of the ISD-190 dock station.

3.2 Guidelines For Electrical Connections

The system is designed to operate in DC 12V to 30V DC electrical system only. If use the DC cable lead, please make sure the DC “+” and “-” input correct, the wire “Blue” Color is “+”, and “Brown” Color is “-” or “GND”.



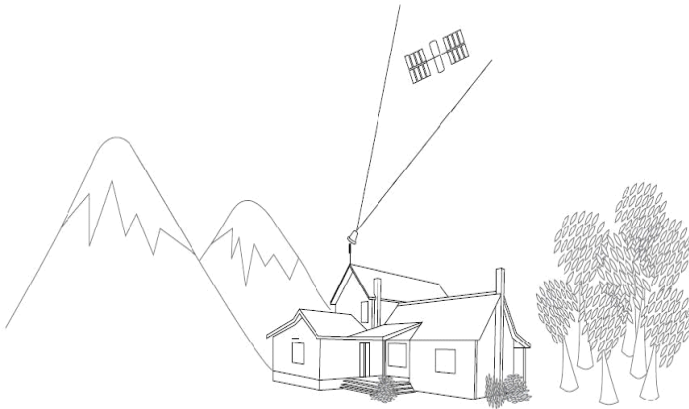
Warning

Do not connect your ISD-190 marine dock interface power cable to power the unit until the full installation is completed. Whenever Do not connect the power directly to AC“220V”, if you only have AC power, you can choose the adaptor or transfer the AC 110V ~ 220V to DC 12V power.

3.3 Mount The Antenna

The Antenna should only be connected and disconnected when the ISD-190 marine dock is not powered. Connecting the antenna after power-up can result in prolonged the satellite searching time.

Please make sure the antenna is not shield by the other building or heavily leafed trees or the other antenna, nearby above mentioned can all degrade performance as they block the signal between the antenna and the satellite.



Marine satellite phone performance is immune from natural environments such as clouds, fog, rain, snow, wind and smoke etc.

4. Installation Procedure

Install the ISD-190 marine dock as following order.

1. Mount the ISD-190 marine dock main unit.
2. Install the Outdoor marine satellite antenna ISA-190.
3. Connect the antenna cable to main unit.
4. Connect the Audio port, USB port and insert the satellite and GPS antenna to satellite phone hand-hold device as below (Figure: Connection).
5. Connect the DC power cable.

Installation the satellite phone handset device to ISD-190 dock Station key point instruction:

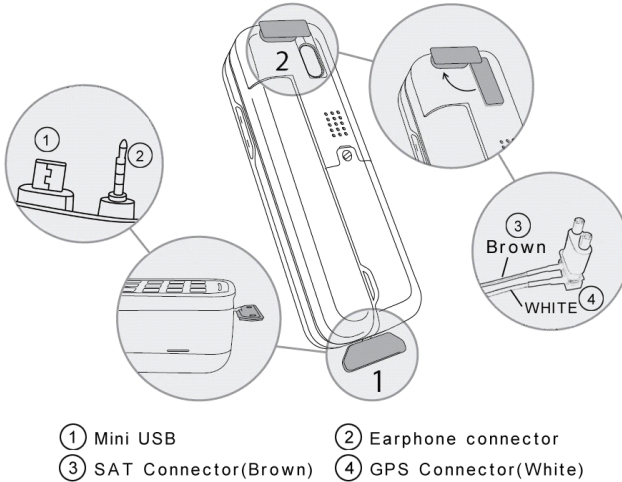
- ① To place the satellite phone into the docking unit, both the covers on the external antenna connectors and the USB/Audio connectors need to be opened.
 - a. The antenna door must be placed at 90 degree to the antenna connector cavity

and run parallel to the top edge of the phone.

b. The cover in the base of the phone should be fully opened position.

Please see below photo.

- ② . Take out the 2 connector port: USB and Audio cable, insert it to your satellite phone.



- ③ . Swing the phone down into the station slot, insert the 2 antenna to your handset device, press down the phone, so that the 2 antenna port insert into the phone properly. We suggest you put the 2 hole rubber case inside the handheld at first. It is more easy to insert the antenna connector .

Notice: The 2 antenna, brown color line connector up and white color line connector down side . it is very important , mistake connect this will cause can not find satellite properly.

- ④ . Fix the cover case. To remove the handset from the dock station, you need remove the cover case at first, and move out the phone, and take out the antenna and USB port and Audio port from the phone.

5. Operate Method

- After done the installation, then connect the dock to power.
- Switch on your phone by holding down the RED key  for several seconds.
- Check your phone is connected to the satellite network – **Satellite network**

supplier brand is displayed at the top left of the screen, it means your satellite phone is “ready for service” .

- Ensure that your phone has a GPS fix – the GPS fix required  icon is not displayed.
- Remove the privacy handset from its cup.
- Dial the phone number (using the full country code) on the satellite phone keypad whilst docked. Press GREEN key , eg. +0086 10 2345678.
- A message is displayed on the Satellite Phone to indicate a call is in progress.
- Press the RED key on the satellite phone handset to end the call.
- When there is coming call , you need press the GREEN Key  to receive the coming calls .
- Switch off your phone by holding down the RED key  until the screen shuts down.
- Disconnected the power of dock.

Charging the Satellite phone handset

The ISD-190 provides charging power to the satellite phone handset via USB connector. The satellite phone battery is a lithium-ion cell which has a safety temperature range whilst charging. The range is from 0 to 45 degree. it is ideal for keep the ambient temperature to be approximately 15 degree below the 45 degrees upper limit.

The ISD-190 marine dock has in-built MCU to control and manage the charging status, when the battery is full, the device will stop the charging current.

6. Accessories

Package contents:

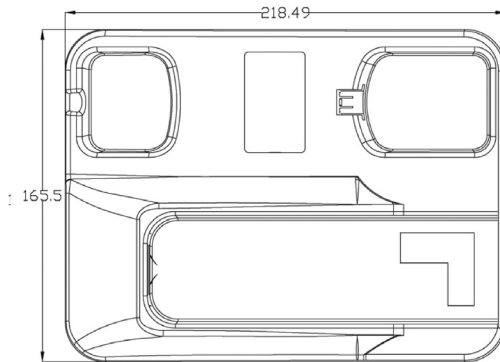
- ISD-190 marine dock main unit ×1
- Privacy handset ×1
- DC Power Cable / Lead ×1
- Satellite Antenna ×1
- Satellite Mounting bracket ×2
- 10M Antenna Cable ×1
- Installation Spare Parts ×1
- User manual ×1

Check that your ISD-190 marine dock package contains all of the following items.

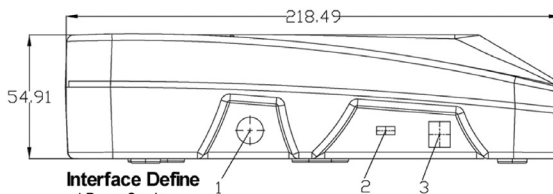
7. System Structure

Installation size chart

Product configuration



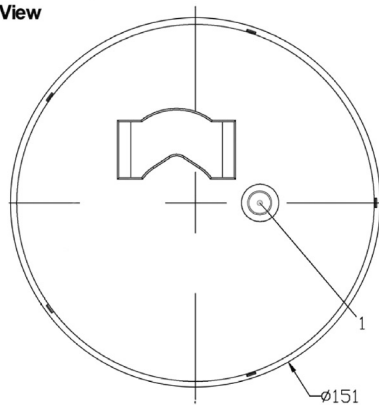
Product Side View



Interface Define

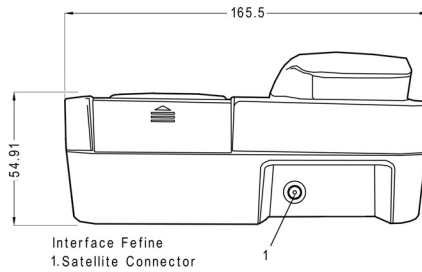
- 1. Power Supply
- 2. USB Port
- 3. Microphone

Antenna Upward View



Interface Define

- 1. satellite port



8. Trouble Shoot

Problem	Answer
How do I know if my Satellite phone is registered on the satellite network	1. The satellite phone will indicate the “inmarsat” at the top left corner of the screen, and middle will display “ Ready for service” etc.
The satellite phone handset device remind you appoint the antenna to the sky. 	2. Make sure the antenna is not shield by the other high building or tree 3. Double confirm the antenna whether fixed properly. - The 2 Antenna connector to the handhold need fix well, if not fixed well , will mention this problem - Outdoor Antenna connector whether fixed tighten , please make sure the connector screw tighten well , otherwise it will affect the satellite signal
Satellite searching failure, can not register successful.	Please make sure your SIM card is under valid period. And make sure it is active .If confirm no problem, you can try more time , the first time search will spend more time for GPS position.
Why no voice in the earphone when pick up the privacy handset?	You need dial the “Green” color key on your satellite phone to connect the telephone at first. The another reason maybe your privacy handset did not properly put on the dock unit, the device can not detector it.